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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/904,465  | 07/13/2001  | Steven E. Swenson    | MSFT-0584/167511.2  | 8067             |
| 41505   | 7590        | 03/25/2005           | EXAMINER            |                  |
| WOODCOCK WASHBURN LLP<br>ONE LIBERTY PLACE - 46TH FLOOR<br>PHILADELPHIA, PA 19103 |             |                      | CHANG, JUNGWON      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2154                |                  |

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/904,465             | SWENSON ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jungwon Chang          | 2154                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 December 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/10/01.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

1. Claims 1-20 are presented for examination.
2. The cross reference related to the application cited in specification must be updated (i.e., updating the relevant status with PTO serial numbers or patent numbers where appropriate on page 1, lines 7-9; page 6, lines 11-14).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Eyal (US 6,389,467).

5. As to claim 1, Eyal discloses the invention as claimed, including a method for automatically performing digital signal processing (DSP) processing on media entities (automatic categorization of music files; 290, fig. 2; col. 16, lines 43-54) comprising the

steps of:

identifying media entity data for DSP processing (col. 12, lines 28-32; genre data is a class identifier; col. 19, lines 55-64; col. 20, lines 9-14);

processing said identified media entity data in a computing environment having at least one computer server (215, 230-280; fig. 2) to create DSP processed media entity data (150, fig. 1; col. 6, line 64 – col. 7, line 4; col. 14, lines 50-60); and

aggregating said DSP processed data for storage in a persistent data store (back-end database, fig. 2; col. 7, lines 5-6, 18-26 and 28-35; col. 13, line 65 – col. 14, line 9; col. 22, lines 59-67; col. 23, lines 18-28 and 45-48; col. 24, lines 13-17).

6. As to claim 2, Eyal discloses wherein said identifying step comprises the step of:

communicating with at least one data store having DSP unprocessed media entity data (new media entity data; col. 22, lines 52-58; col. 23, lines 59-62; col. 24, lines 13-31);

generating data identifying information about said unprocessed media entity data (indexing; col. 22, lines 66-67; col. 23, lines 45-48); and

communicating said generated data identifying information for use in DSP processing (col. 22, lines 59-65; col. 24, lines 13-17).

7. As to claim 3, Eyal discloses receiving DSP unprocessed media entity data (col. 22, lines 52-58; col. 24, lines 13-17);

segmenting said DSP unprocessed media entity data (this process is routinely

executed to add all newly added media to the appropriate play-lists; col. 26, lines 30-32) for processing (col. 26, lines 19-51; col. 28, lines 60-67); and

spawning at least one DSP process performing DSP functions and operations on said DSP unprocessed media entity data to produce DSP processed data (col. 22, lines 59-67; col. 23, lines 45-48; col. 24, lines 13-17).

8. As to claim 4, Eyal discloses copying data from a media entity data store having DSP unprocessed media entity data to at least one portion of a computing environment performing DSP processing (col. 24, lines 24-31; col. 26, lines 30-32 and 50-51).

9. As to claim 5, Eyal discloses converting said unprocessed media entity data into a format consistent with DSP processing (col. 22, lines 64-67; col. 24, lines 24-31).

10. As to claim 6, Eyal discloses deleting the originally copied data once said converting is completed (col. 24, lines 29-31).

11. As to claim 7, Eyal discloses collecting said DSP processing data for storage in a persistent DSP processed media entity data store (back-end database, fig. 2; col. 22, lines 66-67; col. 23, lines 18-28).

12. As to claim 8, Eyal discloses collecting data for all DSP processed media entities (col. 15, lines 37-45; col. 16, lines 43-54); sorting said collected data to create an

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aggregated DSP processed data set representative of the original data, said sorting employing at least one weighting and/or averaging algorithm to realize sorting (1030, fig. 12; col. 6, lines 11-41; col. 6, line 64 – col. 7, line 6; col. 29, lines 1-21); storing said created aggregated DSP processed media entity data set in a persistent data store (back-end database, fig. 2; col. 7, lines 5-6, 18-26 and 28-35; col. 13, line 65 – col. 14, line 9; col. 23, lines 18-28).

13. As to claims 9 and 10, they are rejected for the same reasons set forth in claim 1 above. In addition, Eyal discloses a computer readable medium bearing computer executable instructions (col. 11, lines 38-44).

14. As to claim 11, it is rejected for the same reasons set forth in claim 1 above. In addition, Eyal discloses a computing device (fig. 2; col. 10, line 46 – col. 11, line 2; col. 13, lines 40-64).

15. As to claim 12, Eyal discloses a media entity identification system that operates on at least one cooperating data store having DSP unprocessed media entities to identify DSP unprocessed media entities (new media entity data; col. 22, lines 52-58; col. 23, lines 45-62; col. 24, lines 13-17); a DSP processing system receiving said DSP unprocessed media entities (col. 22, lines 52-58; col. 24, lines 13-17) and performing DSP operations and/or function on said DSP unprocessed media entities to generated DSP processed media entities (col. 22, lines 64-67; col. 24, lines 24-31); and an

aggregation system for aggregating DSP processed media entities into data sets representative of original DSP unprocessed media entity data sets for storage in a persistent data store having aggregated DSP processed media entities (col. 22, lines 59-67; col. 23, lines 18-28 and 45-48; col. 24, lines 13-17).

16. As to claim 13, Eyal discloses a distributed computing environment having at least two computer servers capable of executing distributed automated DSP processing processes (215, 230-280; fig. 2; col. 13, line 40 – col. 14, line 9).

17. As to claims 14 and 15, Eyal discloses wherein said DSP processing system employs said generated identification information to retrieve DSP unprocessed media entity data from said cooperating data store having said DSP unprocessed media entity data (col. 22, lines 52-67; col. 23, lines 45-62).

18. As to claim 16, Eyal discloses wherein said DSP processing system spawns at least one DSP process on one of said at least two computer servers to process said DSP unprocessed media entity data (col. 22, lines 59-67; col. 23, lines 45-48; col. 24, lines 13-17), said DSP process converting said DSP unprocessed media entity data to a data format consistent with DSP processing (col. 22, lines 64-67; col. 24, lines 24-31).

19. As to claim 17, Eyal discloses communicating means for communicating said DSP unprocessed media entity from said DSP unprocessed media entity data store

(new media entity data; col. 22, lines 52-58; col. 23, lines 59-62; col. 24, lines 13-31).

20. As to claim 18, Eyal discloses wherein said aggregation system comprises at least one weighting and/or averaging algorithm for use when aggregating said DSP processed media entities (1030, fig. 12; col. 6, lines 11-41; col. 6, line 64 – col. 7, line 6; col. 29, lines 1-21).

21. As to claim 19, Eyal discloses a method for automating DSP processing in a music matching and analysis system (fig. 2; col. 14, lines 50-60; col. 16, lines 43-54; col. 19, lines 55-64; col. 20, lines 50-64; col. 26, lines 19-32) comprising the steps of:

providing a computing environment (fig. 2) capable of executing at least one DSP process (col. 14, lines 50-60; col. 16, lines 43-54; col. 19, lines 55-64; col. 20, lines 50-64; col. 26, lines 19-32), said DSP process identifying DSP unprocessed media entities (new media entity data; col. 22, lines 52-58; col. 23, lines 54-62) and performing DSP functions and operations on said identified DSP unprocessed media entities to generate DSP processed media entities (col. 22, lines 59-67; col. 24, lines 13-31);

wherein said computing environment is a distributed computing environment capable of running at least two parallel DSP processes (distributed architecture permits simultaneous playback of thousands or millions of multiple streams; col. 33, lines 21-30 and 40-50);

providing a data store having at least one unprocessed media entity (col. 22, lines 52-58; col. 23, lines 54-62; col. 24, lines 13-31); and

providing a persistent data store capable of storing DSP processed media entities (back-end database, fig. 2; col. 7, lines 5-6, 18-26 and 28-35; col. 13, line 65 – col. 14, line 9; col. 22, lines 59-67; col. 23, lines 18-28 and 45-48; col. 24, lines 13-17).

22. As to claim 20, Eyal discloses providing at least one communications means to communicate DSP processed media entities to participating users (col. 30, lines 11-37).

### ***Conclusion***

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Francois Pachet, patent 6,794,566, Diamond et al, patent 6,842,761, Picker et al, patent 6,748,395, Ikezoye et al, patent 6,834,308, Eric Gunnerson, patent 6,657,116, Sean Ward, patent 6,526,411, Eyal et al, patent 6,721,741, Weare et al, patent 6,657,117, Hasegawa et al, patent 6,441,291 disclose a method and apparatus for automatically classifying media entities and dynamically generating of playlists to a user.

Wold et al, "Content-Based Classification Search, and Retrieval of Audio", IEEE, 1996.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JWC  
March 18, 2005